

Response to Comments Document
National Pollutant Discharge Elimination System (NPDES)
Permit No. NH0100234, City of Portsmouth

Introduction:

In accordance with the provisions of 40 C.F.R. §124.17, this document presents EPA's responses to comments received on the Draft NPDES Permit (NH0100234) for the City of Portsmouth. The responses to comments (RTC) explain and support the EPA determinations that form the basis of the Final Permit. The City of Portsmouth draft permit public comment period began July 25, 2006 and ended on September 22, 2006. A public hearing was held at the City of Portsmouth's City Council Chamber on September 7, 2006. During that hearing, EPA received oral comments from several individuals. A transcript of the hearing is part of the administrative record for this permit¹. The public hearing was also broadcast via cable TV (public access) to the residents of Portsmouth. A video copy of the public hearing is also contained in the administrative record.

EPA received written comments from the following individuals:

1. Steve Marchand², Mayor of Portsmouth
2. John Bohenko, City Manager of Portsmouth²;
3. David Allen, Deputy Director of Public Works for City of Portsmouth²;
4. Peter Rice, City Engineer for the City of Portsmouth;
5. Jameson French, Lea Aeschliman, and Eileen Foley, Trustees of Trust Funds, City of Portsmouth²;
6. Jeffrey Meyers of Nelson, Kinder, Mosseau and Saturley, PC, Attorney at Law for the City of Portsmouth; and,
7. Thomas Irwin, Attorney at Law for the Conservation Law Foundation.

The Final Permit is substantially identical to the Draft Permit that was available for public comment. EPA's decision-making process has benefited from the various comments and additional information submitted; the information and arguments presented resulted in several minor changes to the final permit. A summary of the changes made in the Final Permit are listed below. The analyses underlying these changes are explained in the responses to individual comments that follow.

¹ The transcript correctly records that the hearing was put in recess from 8:55 until 9:15 pm. The hearing officer reopened the hearing at 9:15, and upon seeing and hearing no one from the audience wishing to comment, the hearing officer again recessed the hearing until 9:45 pm. This is also accurately recorded in the transcript. However, the transcript states that the hearing was closed at 9:45 pm and does not record any testimony beyond that which was recorded prior to the two recesses. This is incorrect. Upon reopening of the hearing at 9:45, one commenter (Richard Smith, resident of Portsmouth) did come forward and provide testimony for the record. His comments are reflected in notes taken at the hearing by EPA permit writer Damien Houlihan and are also recorded in the video of the public hearing. EPA's response to Mr. Smith's comments is included in this response to comments document.

² These comments were also read into the record at the September 7, 2006 public hearing. Therefore, responses to these comments are contained in the responses found in Section I, "Public Hearing Comments" found below.

1. The language in Part I.A.1, footnote 7 of the draft permit has been replaced. The footnote now reads: "Enterococci shall be tested using an EPA approved test method (see 40 C.F.R. Part 136, Table 1A)." See response II.C.3.a below.
2. Bullet 4 of Part I.C.3 has been changed from "National Weather Service precipitation data from the nearest gage where precipitation data are available at daily (24-hour) intervals and the nearest gage where precipitation data are available at one-hour intervals. Cumulative precipitation per discharge event shall be calculated...." to "Precipitation data from the City of Portsmouth gage (daily (24-hour) intervals and one-hour intervals). Cumulative precipitation per discharge event shall be calculated." See response II.F.I below.
3. Part I.A.2 has been changed from "The discharge shall not cause a violation of the water quality standards ..." to "The discharge shall not cause or contribute to a violation of water quality standards ..." See response IV.A below.
4. EPA reformatted the general conditions in Part II and it now consists of 25 pages, not 27 as stated in the draft permit. Therefore, the language in the last paragraph on page 1 has also been changed from "...27 pages in Part II ..." to "...25 pages in Part II ...". There are no substantive changes to Part II.
5. Whole Effluent Toxicity testing frequency reduction. The provision found at Part I.D.1 has been changed from "The permittee may submit a written request to the EPA requesting a reduction in the frequency (to not less than once per year) ..." to "The permittee may submit a written request to the EPA requesting a reduction in the frequency (to not less than twice per year) ..." A requirement to provide a copy of any such request to the Conservation Law Foundation in Concord, NH also has been added to Part I.D.1 of the permit. Part I.D.1 has been further modified by addition of the following language: "EPA reserves the right to return to the original toxicity testing schedule if subsequent testing results warrant it. Notification of any such requirement will be provided to the permittee by certified mail."
6. Table at Part I.A.1, the TSS influent measurement frequency has been changed from "2/week" to "2/month" to match the BOD influent measurement frequency. This change corrects an inadvertent typographical error contained in the draft permit.
7. Table at Part I.A.1, the Total Residual Chlorine measurement frequency has been changed from "continuous" to "2/Day" and the sample type has been changed from "recorder" to "grab." See response II.G.2. below.

I. PUBLIC HEARING COMMENTS

- A. EPA received numerous comments regarding the schedule for implementing secondary treatment.

1. MORE RATHER THAN LESS TIME: Several commenters advocated allowing the City enough time to sufficiently study available secondary treatment implementation options prior to construction of any new facility(s).

The City Manager stated that "it is vital that we ... have sufficient time to carefully consider all possible options for implementing this secondary treatment requirement, rather than rush forward to expand the sewer treatment facility at Peirce Island without reviewing the potential impacts to the City. Some the options the City would like to explore include: upgrading the current Peirce Island site to expand to secondary treatment; relocating the plant to the Pease International Tradeport or some other location; possibly diverting a portion of the City's flow to the Pease Wastewater Treatment Plant, a secondary treatment facility, which would allow Peirce Island to remain within the existing footprint; investigating the possibility of a new, regional treatment plant; and, evaluating new types of treatments that may require smaller plant footprints." Additionally, the City's Deputy Director of Public Works stated that "The City is committed to conducting the appropriate studies, to obtaining public input, and to employing sustainable design in meeting the City's commitment to achieving compliance with secondary treatment limits."

Other commenters offered comments supportive of allowing sufficient study time, such as: "... we take the time to do this right ..."; "... we as a community have sufficient time to carefully consider all possible options for implementing this secondary treatment requirement, rather than rush forward to expand the sewer treatment facility at Peirce Island without reviewing the potential impacts to the City."; "We are embarking on a decision that will require a significant impact on the City for the next 50 to 100 years."; "I support the City's request, that it be done in an orderly and all encompassing and perhaps a creative fashion."; "They are committed to meet what your requirements are, but they need some time. And I think it's a reasonable request ..."; "while I think that things should proceed in an expedited manner, I would hope that the EPA does give the City time to do what needs to be done to do a good job and that in the rush to simply get something going, we don't butcher that island, simply to get something done that we'll have to face the rest of our lives out there."; "didn't seem to make sense financially or otherwise to undertake to build a secondary treatment plant while we were still in the middle of the long-term effort to eliminate the sewer overflows, and which are going to have the effect of reducing, I think, the eventual size of the secondary treatment plant we need."; "make sure that we are doing it with all possible speed, that we arrive at a good decision as quickly as we can, but a decision that will be truly a sustainable one, that will be the right decision for the coming century for the City of Portsmouth and for the whole region."

2. TIMELY/TOP PRIORITY/EXPEDITE: Other commenters argued for a timely or aggressive implementation schedule, offering: "the City has been operating under a consent decree since 1990 and here we are in 2006, sixteen years later, so this issue has been kind of carrying on for sixteen years about secondary treatment or at least moving forward with a permit ..."; "... we would ask the EPA, push the City to make this a top priority."; "It's been many, many years that the City was aware that this was an issue and

really dealing with this problem is, again, long overdue. And we, also, are concerned that planning to build an appropriate and a sufficient plant should not become a reason for delay in fulfilling this permit.”; “...see no reason why the City of Portsmouth can't move very fast, considering all the various ramifications at the same time, and also involving the citizenry at the same time, so that we don't have a linear process where one engineering study has to go through a long, circuitous process, then there's a hearing, then there's another engineering study, because that could take 20 years. So our main point is to expedite this quickly and there's no reason why it can't be.”; “you can be careful and fast at the same time”; “The faster it's done, the less it's likely to cost.”; “So we've been dealing with this problem for well over a decade. We strongly urge that the EPA work with the City to develop and implement an aggressive time schedule, time line to address this issue.”; “this planning process should not proceed in a linear manner. It needs to proceed in a more iterative manner that is more time effective, time efficient, so that we don't find ourselves ten years from now still wondering what the City of Portsmouth is going to do in terms of its treatment.”

RESPONSE I.A.1 and 2:

EPA intends to establish an expeditious schedule for the facilities evaluation, design, and construction of a secondary treatment plant, taking into consideration a variety of factors, including: 1) the time necessary to thoroughly evaluate plant siting and treatment technologies; 2) a reasonable and feasible construction schedule once siting is complete; 3) other work the City is involved in that may produce significant environmental results; and 4) the need for other regulatory approvals. EPA agrees that, to the extent possible, alternatives should be evaluated on parallel paths, thereby minimizing the time frame necessary to complete planning and proceed to design/construction. At present, EPA anticipates that the schedule for facilities evaluation will be initially addressed in an administrative order. The schedule for design and construction will be incorporated into a judicial consent decree, either through modification of the existing consent decree between EPA and the City or the entry of a new consent decree. In either case, there will be a thirty day public comment period on the schedule in such consent decree before it is entered by the court.

B. Concerns over expansion at Peirce Island

“I was as vehement against the location on Peirce Island as anybody else, and the reasons that we were against it were the reasons that Mr. Jencks brought forward tonight, because of its recreational potential and because of its historic history.”; “Peirce Island is a treasure.”; “realize without that plant there, what a increased treasure the whole island would be.”; “we do not really want to waste a beautiful place like Peirce Island for a sewage treatment plant.”;

“... the city attorney mentioned about if the footprint was expanded at the present sewer treatment plant, it would probably spoil Prescott Park, it would take Peirce Island and no longer be a recreational area, and it would be devastating to what has been done over there for thousands of dollars upgrading that island to a recreation facility. But I kind a

question the footprint.”; “I just question, with the technology at this day and age, is this practical? Has the footprint been overemphasized?”; “if the state of technology today, and can reduce the footprint, I think the Peirce Island Treatment Plant is a place for the secondary system.”; “... supports a new location.”

RESPONSE I.B.:

The siting of the facility is the responsibility of the City. EPA agrees that the City should take into account the recreational and historic importance of Peirce Island in its decision on where to build the necessary treatment facility(s) to meet the permit limits. Another factor the City should consider, if it decides to relocate the plant, is the existing water quality of a different receiving water and what effect Portsmouth's discharge would have on a different receiving water.

C. Chlorine smell

“We are getting a lot of reports from our members of a strong chlorine smell that's coming, emitting from the plant and from the river ... is there a number, an 800 number that we can call when we get that smell and let someone know what's going on?”

RESPONSE I.C.:

There is no EPA regulatory requirement regarding chlorine odor, but the presence of a noticeable chlorine smell in the river could be an indication of a high chlorine residual in Portsmouth's discharge, possibly due to plant upset or poor operation. Portsmouth's prior permit did not contain a numerical total residual chlorine limit, but the new permit does establish chlorine residual limits of 0.33 mg/l (average monthly) and 0.57 mg/l (maximum daily).

EPA is interested in knowing when chlorine odor is detected in the river. Therefore, anyone who observes a chlorine odor should feel free to contact Damien Houlihan at (617) 918-1586. Anyone reporting a chlorine smell in the river or in the vicinity of Portsmouth's WWTF should record the time, the date, and the approximate location when the observation was made. Members of the public who observe a chlorine smell should also feel free to contact the NH Department of Environmental services at (603) 271-1493 and the City of Portsmouth.

D. Other

Land application – “we feel very strongly that the sewage treatment should have a land application for the waste that's coming out of a secondary attrition rate. And I realize that the confines of the City are limited, but there are ways that it could be done with a land application.”

RESPONSE I.D.:

EPA is unsure of what the commenter meant by "secondary attrition rate." In any event, sludge generated from the secondary treatment facility is eligible for land disposal. While there are some wastewater treatment plants that land apply their effluent, the amount of effluent land applied is small in comparison to Portsmouth's discharge.

E. Public participation

"... we have to vet this in the public arena in Portsmouth, but the outcome is certain, that we'll be in favor of the upgrade and secondary and maybe even tertiary, but we've got to look at it and you've got to give us the time to look at it, because that was a terrible mistake in 1961 to put it there instead of the other, one of the other two locations."

RESPONSE I.E.:

It's the responsibility of the City to include the public in any decisions it makes regarding the location of the necessary treatment facility(s). EPA agrees that the public should be informed and consulted. But ultimately the City is obligated to meet the final permit limits in an expeditious fashion.

F. Consider Piscataqua Basin

"... if I may ask you to consider the Piscataqua Basin as such as a subject. The Piscataqua River flows, as you know, in a southerly direction and it encompasses the flow of waters from cities of Dover, from the Town of Durham, from Newington, and on the other side we have the towns in Maine of the Berwicks, as well as Eliot, as well as Kittery. I heartedly endorse the recommendations of my preceding speakers by saying let's not rush into this, because I think it is not -- I think it would be foolhardy to rush the judgment to make an expedient decision to cure something that appears to be a Band-Aid to me. I would prefer, if I may plead with you, to consider the macro of the Piscataqua Basin ..."; "... bring together the State of Maine and New Hampshire for some bilateral consideration that we may combine the needs of those towns with ours."; "encourage a study group that would include both the State of Maine and New Hampshire to reach some kind of a conclusion to see if there is -- what are the merits of combining facilities?"; "it's a decision that we have to make in the context of what's going on in the entire Piscataqua/Great Bay region, communities that are upstream from us, and we have to be sure that whatever decision and capital expenses we undertake, that those aren't, you know, counteractive or all for naught by decisions that are made elsewhere."; "you're essentially telling the city to come up with a specific solution for our sewage problem, yet at the same time the city really doesn't know what regional solutions will ultimately be proposed. And, you know, you can think of some scenarios where Portsmouth could end up deciding on a secondary system that does not integrate well into the proposals made by the larger organization, The Great Bay Study Commission."

RESPONSE I.F.:

We are mindful of the interest various communities have in exploring regional treatment options. This issue will be evaluated in the context of setting a compliance schedule.

G. Section 106 of the Historic Preservation Act

"... if there is more work to be done at Peirce Island, if the facility gets expanded, Section 106 of the Historic Preservation Act will be called in again and archaeological research will be required to check the additional impacts on the island."

RESPONSE I.G.:

See response to comment III.A. below.

H. Alternative Treatment/Technology

"...using a manmade salt marsh as a waste treatment facility and they've had great success with that in Sweden, and it cost less money and even has attracted birds."; "The other option is evaluate new types of treatment that may require a small plant footprint."; "why isn't the City of Portsmouth looking into the latest state of the art? It's called an oxidized system, which reduces the footprint almost to one-third of the original standing primary system that we have already."

RESPONSE I.H.:

EPA encourages the City to look at all treatment options available. EPA's secondary treatment permit limits are based on biological treatment, which is typically preceded by primary settling. The City is free to meet the permit limits using alternative technology(s).

I. Nitrogen Loading

"... we feel that it's essential that the draft permit be revised to include limits for total nitrogen. The issue of nitrogen loading in the Great Bay estuary is one of growing concern among scientists and researchers who are knowledgeable of the Great Bay estuary ..."

RESPONSE I.J.:

See response to Comment IV.B.

II. CITY OF PORTSMOUTH WRITTEN COMMENTS

A. Cover Sheet - CSO coordinates are missing. City can provide information utilizing hand held GPS.

RESPONSE II.A.:

EPA does not typically include the exact coordinates for outfalls on the cover page. This information is more typically contained in the fact sheet. However, upon review of the fact sheet, it is clear that the CSO coordinates were not cited or referenced. Therefore, EPA includes them below (as taken from the City's 5/4/2004 revised application):

010A (Parrot Ave.): 43 deg. 04.80 minutes (latitude), 70 deg. 45.53 minutes (longitude)

010B (Parrot Ave.): 43 deg. 04.39 minutes (latitude), 70 deg. 45.47 minutes (longitude)

012 (Marcy Street): 43 deg. 04.60 minutes (latitude), 70 deg. 45.06 minutes (longitude)

013 (Deer Street): 43 deg. 04.80 minutes (latitude), 70 deg. 45.53 minutes (longitude)

B. Page 1 last paragraph Attachment B has 9 pages not 8 as listed.

RESPONSE II.B.:

It is unclear what the comment is referring to. The draft permit states that Attachment B has 1 page. Attachment A of the draft permit is listed as containing 7 pages. EPA has reviewed the attachments to the final permit and has confirmed that Attachment B contains one page and lists the CSO outfalls, and Attachment A is the Marine Acute Toxicity Testing Protocol and contains 7 pages. No change has been made to the final permit based on this comment.

C. Effluent Limitations and Monitoring Requirements (Part I. A.1 of draft permit)

1. This is a secondary treatment type of permit and our facility is a primary treatment facility. Before a schedule for upgrading to secondary can be committed to the City must complete a facilities evaluation to determine the most appropriate course of action. This study will look at alternatives including: 1) upgrading the current Peirce Island site to expand to secondary treatment; 2) relocating the plant to the Pease International Tradeport or some other location; 3) possibly diverting a portion of the City's flow to the Pease Wastewater Treatment Plant, which would allow Peirce Island to remain within the existing footprint while adding secondary treatment; 4) investigating the possibility of a new, regional treatment plant; and, 5) evaluating new types of treatments that may require smaller plant footprints.

In addition, in undertaking the studies necessary to upgrade to secondary treatment, the City must be mindful of the current Combined Sewer Overflow-Long Term Control Plan to ensure that any changes to the Peirce Island plant do not also impact the ongoing sewer separation program.

RESPONSE II.C.1.:

As discussed above, EPA understands that the City will need time to evaluate, design, and construct the necessary treatment facility(s) to meet the final permit limits. The City

is free to evaluate a variety of alternatives as long as they are evaluated simultaneously and expeditiously. EPA agrees that it is appropriate to consider the CSO LTCP as part of the planning and design of the treatment plant.

2. Enterococci Bacteria - The City believes this requirement is redundant and unnecessary due to the discharge location. If the Fecal Coliform requirement is met the Enterococci requirement will also be met. The City would like to demonstrate this by performing side by side testing to show that if the Fecal Coliform limit is met the Enterococci limit will also be met.

RESPONSE II.C.2.:

The permit does not contain an enterococci limit, but it does require monitoring. EPA believes it's important to retain the enterococci monitoring in the permit at this time, since the water quality standards include enterococci criteria for tidal waters used for swimming. However, EPA notes that it may be possible, at some point in the future, to reduce or eliminate the monitoring requirement based on the "side-by-side testing" results that the City proposes to perform during this permit cycle. (See also Response to Comment IV.C below).

3. Explanation of Superscripts to Part I. A.1

a. Note 7 requires that we use ASTM method D6503-99. As outlined in the Draft permit Note 7, this is a formal request for changing the test method from ASTM method D6503-99 to Standard Methods No. 9230-B. We have found that membrane methods do not work well with wastewater and multiple-tube fermentation is more appropriate. In addition, the ASTM method D6503 using IDEXX Enterolert™ was developed for drinking water not wastewater effluent.

RESPONSE II.C.3.a.: Portsmouth is free to analyze its effluent for enterococci using any of the EPA approved methods for enterococci as found at 40 C.F.R Part 136. Therefore, the requirement to use ASTM method D6503-99 has been deleted from the permit and footnote 7 has been changed to allow for the use of any method found at 40 C.F.R. Part 136 for analyzing enterococci.

b. Notes 8 and 9. Based on past testing we know that primary effluent will not comply with the Whole Effluent Toxicity test requirements of this draft permit. We request that this requirement be waived until the new secondary treatment plant is brought on-line.

RESPONSE II.C.3.b.: EPA will evaluate the timing of WET testing in the course of establishing a compliance schedule for treatment plant construction.

D. Is there a definition of "industrial" wastewater that we can apply to our customers? We are assuming that any process water that is not sanitary waste is considered industrial.

RESPONSE II.D.: See 40 C.F.R. Section 403.3 for the definition of industrial user.

E. Effluent Limitations and Monitoring Requirements (Part I. A.8 of draft permit, Page 7 of 15). Given the nature of the City's combined sewer, the Peirce Island plant is currently exceeding the 80% of 4.8 mgd which requires the initiation of a facilities evaluation. The City intends to perform the necessary studies to determine the most effective means of meeting the new secondary requirements. As part of this study a projection of future flows will be made.

RESPONSE II.E.:

EPA notes the comment and agrees that the City must determine the most effective means of meeting the new secondary requirements.

F. Records and Reporting (Part I.C.3 of draft permit, Page 10 of 15)

1. Last bullet – Can we use City weather station rain gage in-lieu of National Weather Service precipitation data. We believe given the nature of thunder storms a rain gage miles away may not accurately reflect the actual rain event experience locally.

RESPONSE II.F.I.:

EPA agrees that the City's rain gage will provide more representative results and therefore has changed Part I.C.3 to read, in pertinent part, "City of Portsmouth precipitation data including 24-hour and 1-hour intervals."

2. Currently the City is operating under a 1990 Consent Decree Civil No. 89-234-D which requires monthly submission of CSO data to the EPA, the NHDES as well as the United States District Court for the District of New Hampshire. We request that the annual report replace the monthly reports. If this is not possible we would like to have the required annual CSO report waived.

RESPONSE II.F.2.:

The issuance of this NPDES permit cannot be used to modify an existing Consent Decree and therefore, monthly submissions under the Consent Decree shall continue. With regard to the City's request to "waive" the reporting of the annual CSO report required under Part I.C.3 of the permit, EPA believes that this information is important to have as part of the permit file and, further, does not believe this requirement is overly burdensome since, as the commenter points out, monthly reporting is already required. Presumably, the annual report can be a compilation of the monthly reports.

G. State Permit Conditions, (Part I.F of draft permit).

1. Is there a definition of "industrial" wastewater that we can apply to our customers? We are assuming that any process water that is not sanitary waste is considered industrial.

RESPONSE II.G1.: See response to II.D above.

2. Continuous Chlorine residual monitoring has been attempted on primary effluent during the last 16 months and has not been successful due to the nature of the wastewater. We ask that this condition be deleted until we upgrade to secondary treatment. In lieu of continuous chlorine residual monitoring we request that the City is allowed to continuously monitor the level of the bulk chlorine storage tank and show through usage that chlorine is being dosed. This tank is monitored by our SCADA system and tank levels are automatically downloaded to an excel spreadsheet daily. Our SCADA system also monitors our chemical feed pumps and provides continuous alarms coverage for pump failure and leakage. We believe this approach along with the twice-daily chlorine grab samples required by the permit provides the monitoring that is intended by the continuous chlorine residual monitoring requirement.

RESPONSE II.G.2.: EPA acknowledges that continuous chlorine monitoring has not been successful with regard to Portsmouth's primary effluent. However, this permit requires secondary treatment and continuous chlorine monitoring (both before and after dechlorination) should be possible once the facility achieves secondary treatment. Therefore, no change has been made to the final permit.

As previously explained in this response to comments, through an administrative order and/or consent decree, interim limits and conditions will be developed along with a compliance schedule, and will apply until the secondary treatment facility is operational. As the permittee recommends above, monitoring the chlorine level of the bulk storage tank and 2/daily grab effluent compliance samples, in lieu of continuous chlorine monitoring, will be considered when EPA develops the interim limits and conditions.

3. The requirement of notification to the State for average daily flows above 4.8 mgd provides no benefit to the environment and is an unnecessary burden to the City. The City's collection system is combined sewer meaning during rainy periods of the year the City would have to call the State daily and follow-up with a five day letter. This is unnecessary. Please remove this requirement.

RESPONSE II.G.3.:

This is a state requirement. The requirement to notify the State by placing a phone call to the 24-hour pager is not overly burdensome. The permit does not require any written follow-up.

H. Attachment B – CSO Outfalls Under the Jurisdiction of the City of Portsmouth. CSO 012 (Marcy Street) is a manually operated overflow. The City is currently in construction on a project that will eliminate this CSO. This project is scheduled to be completed by spring of 2007.

RESPONSE II.H.:

Since this CSO is not yet eliminated, it remains in the final permit. When the CSO is eliminated, the City can report "no discharge" in the monthly discharge monitoring report (DMR) until the permit is either modified or re-issued.

I. Dilution Factor

The EPA has used a dilution factor for existing conditions derived by the NHDES based on the June 3, 2003 NHDES review comments to the Outfall Evaluation Report (Underwood Engineers, Inc. March 28, 2003). The NHDES has used a lower velocity than that estimated in the report based on a smaller cross-section.

The velocity within the receiving stream was measured using an Acoustic Doppler Current Profiler. The river velocity was measured along a transect of the river at the outfall location for the entire river width. A velocity current and directional vector was measured along every square meter of river cross-section, producing thousands of measurements.

While the NHDES has used what they consider a reasonably conservative estimate, we believe the velocity used in the report is defensible from a scientific basis and that the dilution is 56. The NHDES is overly conservative in applying the lower velocity. Therefore the dilution should be 56 and the chlorine residual limits should be recalculated to reflect the appropriate dilution.

RESPONSE II.I.:

EPA and the NH DES have checked the March 28, 2003 Underwood Engineers, Inc. (UEI) report and the DES's June 3, 2003 comment letter. We understand that many velocity measurements provided in Appendix C of the UEI report were made along a significant portion of the entire cross section which extends more than 800 feet across the Piscataqua River, beginning at the southern shore near the existing outfall location. All of these measurements were then averaged and two such averages (0.141 m/s and 0.11 m/s) were available for the 15 minute after neap slack low tide condition. The velocity of 0.141 m/s corresponded to the river cross section length of 720.8 feet and the velocity of 0.11 m/s that we chose corresponded to the narrower river cross section of 566 ft.

The CORMIX 1 (single port diffuser) model instructions provide that more weight be given to the ambient velocities near the outfall. Thus, the velocity of 0.11 m/s was selected. Using the information nearer the outfall in this case is further justified since it minimizes the use of the high velocities found on the shallow "shelf" which is found near the northern side of the cross section (near Henderson Point). Of the available two average velocities, the shorter cross section of 566 feet provided the average velocity closest to the outfall.

Note that the dilution factor of 56 noted in the UEI comment and in its report is based on using a 15 minute before neap slack tide velocity of 0.091 m/s. However, Dr. Doneker, EPA's Cormix technical support person, reported in his letter to UEI dated March 9, 2003 that the ambient conditions causing the more limiting dilution are 15 minutes after spring low tide, which is the condition DES used. Further, Dr. Robert Doneker also reported, in reply to an earlier DES question, that it wasn't appropriate to use separate modeling runs using near field and far field dilutions. Therefore, using what EPA and DES believed were the appropriate model conditions, the permit limits were based on a dilution factor of 43.5 (as mentioned in item 1 of the June 3, 2003 letter).

J. Nutrient Issues

One comment expressed at the September 7, 2006 public hearing on the draft NPDES permit was that the Peirce Island NPDES permit should include limits for total nitrogen. The City supports the idea that the best practical treatment technology should be used in the upgrade to the Peirce Island Primary Treatment plant and that this may include technology to remove nitrogen. For example, if activated sludge is selected as the cost effective solution to the upgrade, nitrification and denitrification facilities will also be considered.

However, as a matter of principal, no conditions should be set in the NPDES permit without rigorous comprehensive scientific justification for the need. We expect that the proper river studies be performed, including a waste load allocation study and TMDL study that identifies the non-point and point sources of pollution, the need for remediation and the magnitude of the water quality limitations within the river. The NHDES has not indicated in previous water quality reports (303(d) reports) that the Piscataqua River is not meeting water quality for nitrogen or oxygen within the area of the discharge from the Peirce Island WWTF.

We know that EPA has always used good science that drives the need for increasing the resources to remove additional pollutants at wastewater treatment facilities and expect the same high level of investigation for the Piscataqua River.

RESPONSE II.J.:

See response to IV.B below.

K. Comment Concerning Conceptual Site Impacts

A comment was received concerning the veracity of the figure presented to the City Council which showed the potential impact of a secondary plant at Peirce Island.

For the record the figure presented to the City Council was based in part on the 1980 Wright Pierce secondary treatment plant design drawings. These drawings had been completed prior to the Value Engineering Study and Original 301(h) Waiver. In addition, Underwood Engineers, Inc. prepared a preliminary cost estimate of the required upgrades

necessary to meet the new secondary requirements. The intent of the figure in question was to convey the potential impacts the additional treatment tanks and buildings could have to the Island. It was not intended to be a final design or definitive determination of actual facilities.

The City is committed to minimizing the impacts to Peirce Island. To do this we will consider all viable alternatives during the study and design phases of this process.

RESPONSE II.K.:

No response required.

III. WRITTEN COMMENTS BY CITY OF PORTSMOUTH ATTORNEY

A. The tentative permitting decision issued by EPA on July 25, 2006 requires the City to comply with secondary treatment requirements at its wastewater treatment facility on Peirce Island. The City believes that accomplishing full compliance with the secondary treatment standard will require an enlargement of the footprint of the existing facility and that such enlargement will have an adverse effect on the character and use of surrounding historic properties on Peirce Island.

The tentative permitting decision issued July 25, 2006 omits any reference to the National Historic Preservation Act ("the Act" or "NHPA") and the Section 106 Consultation Process that the Act requires. Section 106 of the Act states:

The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or *prior to the issuance of any license*, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or *eligible for inclusion* in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation established under Title II of this Act a reasonable opportunity to comment with regard to such undertaking. *16 U.S.C. 470f – Advisory Council on Historic Preservation, comment on Federal undertakings.* (Emphasis added).

Given the unique and historic character of the land surrounding the wastewater treatment plant on Peirce Island, the City believes that EPA must comply with the requirements of Section 106 of the NHPA prior to the issuance of the final NPDES permit.

1. Property Surrounding Peirce Island Water Treatment Facility is Eligible for the National Register

The City of Portsmouth believes that the property surrounding the Peirce Island Water Treatment Facility is eligible for the National Register of Historic Places. The remaining

ramparts of Fort Washington, a military outpost dating back to the Revolutionary War-era, lie just north of the water treatment facility. Native American Indian artifacts have also been recovered along the shoreline, confirming archaeologists' belief that Native Americans once used the island as a fishing outpost. *Results of Phase 1B Archaeological Survey Peirce Island East End Trails Project, Portsmouth, New Hampshire*, p. 49.

The eligibility criteria for the National Register include properties (1) that are associated with events that have made a significant contribution to the broad patterns of our history; (2) that are associated with the lives of persons significant in our past; (3) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or; (4) that have yielded, or may be likely to yield, information important in prehistory or history. 36 CFR 60.4.

The historic properties surrounding the plant easily satisfy the four criteria for admission to the National Register. Fort Washington was constructed by hand in 1775 to defend Portsmouth from an impending British attack. The earthen ramparts of the fort are still visible today, though they are greatly worn. The southeastern tip of the fort was demolished in 1965 during initial construction of the wastewater treatment plant. The fort was further damaged in 1977 during the expansion of the plant. Today, however, 34 meters of the fort still remain. *Results of Phase 1B Archaeological Survey Peirce Island East End Trails Project, Portsmouth, New Hampshire*, p. 19.

In addition to the presence of Fort Washington just north of the wastewater treatment facility, archaeologists have identified all areas along the shoreline as potentially sensitive for Native American artifacts. During excavation activities conducted in November 2002, six Native American artifacts were discovered. *Id.* at 49.

For these reasons, the City believes that the property surrounding the Peirce Island Water Treatment Facility is eligible for inclusion in the National Register. The City requests that the EPA begin the Section 106 Consultation Process to avoid further degradation of the property surrounding the plant.

2. EPA's Permitting Decision Constitutes a Federal Undertaking

The Section 106 Consultation Process applies to all federal undertakings. The NHPA defines "undertaking" as:

"a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including (1) those carried out by or on behalf of the agency; (2) those carried out with Federal financial assistance; (3) *those requiring a Federal permit license, or approval*, and; (4) those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency." 16 U.S.C. 470(w)(7). (Emphasis added).

The City believes that the tentative permitting decision issued by the EPA on July 25, 2006 constitutes a federal undertaking within the meaning of the Act. Section 106 requires federal agencies to consider the potential impact of their undertakings *prior* to the issuance of any license. *16 U.S.C. 470(f)*. Further, unlike the issuance of an order for remediation of pollution under CERCLA, which has been held to be exempt from the NHPA process, *see Boarhead Corp. v. Erickson*, 923 F.2d 1011 (3rd Cir. 1991), there is no similar exemption from NHPA compliance for Clean Water Act permitting decisions. *See Waterford Citizen's Association v. Reilly*, 970 F.2d 1287 (4th Cir. 1992).

In the City's view, EPA must initiate and complete the Section 106 Consultation Process prior to the issuance of the final NPDES permit.

3. Section 106 Procedural Requirements

The Section 106 Consultation Process involves four basic steps. The first step is to initiate the consultation process by contacting interested parties. The second step is to identify the historic property at issue. The third step is to assess the adverse effects of the proposed federal undertaking. The fourth step is to resolve the adverse effects either through a Memorandum of Agreement between the parties or further consultation with the Advisory Council on Historic Preservation. *36 CFR 800.3-800.6*.

Initiate Consultation: The agency must identify the appropriate State Historic Preservation Officer (SHPO) and/or Town Historic Preservation Officer (THPO) and initiate consultation. The SHPO/THPO may identify other interested parties that should be invited to participate in the Section 106 process including local governments, Indian tribes, and the public at large. *36 CFR 800.3(e)-(f)*.

Identify historic properties: The agency must determine and document the area of potential effects; review existing information on historic properties, including any data concerning possible historic properties not yet identified; seek information from other consulting parties, and finally; identify historic properties and evaluate their historic significance using the National Register criteria. *36 CFR 800.4(a)-(b)*.

Assess adverse effects: An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualifies for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. *36 CFR 800.5(a)(1)*.

Resolve adverse effects: The agency must continue consultation with the SHPO/THPO and notify the Advisory Council about any adverse effects. Resolution of the adverse effects may be achieved with or without direct involvement of the Advisory Council. Execution of a Memorandum of Agreement to avoid, minimize or mitigate the adverse effects shall evidence the agency's compliance with the Act. *36 CFR 800.6*.

As City Manager John Bohenko testified at the hearing held on September 7, 2006, the City is committed to complying with the EPA's secondary treatment requirement. Before the EPA issues its final decision, however, the agency must consider the potential adverse effects this permit will have on the historic property surrounding the Peirce Island Water Treatment Facility.

RESPONSE III.A.:

By letter dated August 4, 2006 to EPA, and in reference to the draft NPDES permit for the City's discharge, the New Hampshire SHPO informed EPA that "the proposed action, as limited and conditioned by the permit, will have no effect on known or expected resources" subject to the NHPA. Therefore we believe no further action under the NHPA is required at this time.

We recognize that in order to meet the permit's secondary treatment-based limits, the City will need to construct new facilities. No decision has been made to build those facilities on Peirce Island. Expansion of the existing facility is only one of several alternatives that the City plans to evaluate. If facilities planning results in a preferred alternative that has the potential to affect historic properties on Peirce Island, EPA will bring this information to the attention of the SHPO and will fulfill its statutory obligations under section 106 of the NHPA, including compliance with the process described in 36 C.F.R. Part 800, as appropriate.

B. The City seeks to confirm that the administrative record for the tentative decision regarding the variance from secondary treatment standards and the draft secondary permit will include all of the records previously filed with EPA by the City and by other parties concerning the discharge of wastewater from the Peirce Island treatment plant beginning with the City's initial application for waiver from secondary treatment requirements of the Clean Water Act filed on December 1, 1982. Specifically, the City believes that the administrative record includes, but may not be limited to, the documents referenced on Schedules A and B (attached).

RESPONSE III.B.: EPA's regulations at 40 C.F.R. §§ 124.9 and 124.18 describe the contents of the administrative record for the draft and final permits. EPA will compile its record consistent with the regulations. EPA is obligated to include in the record all relevant factual information that it considered when making its decision, whether or not that information supported the decision. We do not believe that this obligation means that the record for this final permit decision must include all documents relating to the City's 301(h) waiver request dating back to 1982.

IV. WRITTEN COMMENTS BY CLF

A. On page 6 of the draft permit, paragraph 2 states: "The discharge shall not cause a violation of the water quality standards of the receiving water." This language is an inaccurate statement of the applicable standard under the Clean Water Act and applicable

regulations, which require that discharges not “cause or contribute to” a violation of water quality standards. (Emphasis added). The EPA’s own fact sheet for the draft permit acknowledges this legal standard,³ as does a subsequent provision of the draft permit itself.⁴ The above-referenced language should be amended to include the words “or contribute to” following the word “cause.”

RESPONSE IV.A.:

EPA agrees that the correct language is “cause or contribute to a violation of water quality standards.” The final permit has been changed to include this language.

B. The draft permit imposes no effluent limitation for Ammonia Nitrogen as Nitrogen, merely imposing instead a “report only” requirement. As set forth in CLF’s prior comments, increasing nutrient levels in the Great Bay estuary has become a matter of significant, growing concern. Accordingly, the EPA should establish a specific effluent limitation for Ammonia Nitrogen as Nitrogen, as well as total nitrogen. To ensure adequate safeguards in light of increasing nitrogen levels in the estuary, and to ensure maintenance of water quality standards, we urge the adoption of a 5 mg/l limit for total nitrogen.⁵ Such stringent limits are needed not only to minimize the impacts of nutrients alone, but also their impacts in combination with possible warming trends, which are leading to hypoxic conditions in Rhode Island and which merit close consideration. *See* Attachment B (“Bay bottom is oxygen starved; fish won’t survive,” *The Providence Journal*, Aug. 5, 2006).

RESPONSE IV.B.: – In general, NPDES permit limits are based on either technology requirements or water quality requirements, whichever are more stringent for any given pollutant.

In the case of Publicly Owned Treatment Works (POTWs), EPA is directed to establish technology treatment requirements based upon secondary treatment standards (see § 301 of the CWA, 40 C.F.R. Section 125.3(a)(1)(i), and 40 C.F.R. Part 133). These technology-based requirements were specified in the draft permit and are retained in the final permit. The secondary treatment requirements in 40 C.F.R. Part 133 do not specify a technology-based limit on nitrogen. EPA does not dispute that meeting a limit of 5 mg/l is technologically feasible. Nevertheless, because the technology-based

³ See Fact Sheet at p. 5 (“The permit must limit any pollutant or pollutant parameter (conventional, non-conventional, toxic and whole effluent toxicity) that is or may be discharged at a level that causes or has ‘reasonable potential’ to cause or contribute to an excursion above any water quality standard, including narrative water quality criteria.”) (citing 40 C.F.R. § 122.44(d)(1)) (emphasis added).

⁴ See Draft NPDES Permit at p. 9, ¶C.1.a(1) (“The [CSO] discharges may not cause or contribute to violations of Federal or State water-quality standards.”) (emphasis added).

⁵ Achieving this limit is feasible, especially considering that technology exists to achieve an effluent limit of 3 mg/l for total nitrogen. In fact, in the context of the Seacoast Region Wastewater Management Feasibility Study, in comments submitted by Mr. George Berlandi, the N.H. Department of Environmental Services (NHDES) made the initial recommendation that, “[b]ased on the State of Connecticut’s Long Island Sound’s TMDL,” a 5 mg/l nitrogen limit should be used for wastewater treatment plants discharging to an estuary. Attachment A. With specific regard to Peirce Island, NHDES recommended 8 mg/l. *Id.*

requirements for POTWs do not include limits on nitrogen, the Region may not set a technology-based nitrogen permit limit on Portsmouth's discharge.

In the case of establishing a water-quality based permit limit, EPA must first determine whether the discharge will cause, has the reasonable potential to cause, or contributes to an excursion above any state water quality standard, including narrative criteria (see 40 C.F.R. Section 122.44(d)(1)).

New Hampshire has not as yet adopted a numeric criterion for nitrogen, although the New Hampshire Estuary Program (NHEP) has agreed to lead an effort to develop water quality criteria for estuarine waters. Data from NHEP indicators such as dissolved oxygen, chlorophyll-*a*, total suspended solids, and eelgrass biomass are being reviewed to better understand nutrient dynamics and impacts in the Great Bay Estuary. The outcome of this analysis will be recommendations to the State Water Quality Standards Advisory Committee for specific criteria to protect the water quality of New Hampshire's estuaries from the effects of excess nutrients.⁶ Currently, the water quality standards provide that "Class B waters shall contain no phosphorus or nitrogen in such concentrations that would impair existing or designated uses, unless naturally occurring." Env-Ws 1703.14(b). Excess nitrogen can affect water quality by causing algae blooms and/or low dissolved oxygen levels, both of which can impair existing or designated uses. To date, neither of these conditions is evident in the Piscataqua River (the "receiving water") or even in Great Bay itself. While the commenter has submitted information indicating that the trend of dissolved inorganic nitrogen concentrations in the Great Bay estuary is generally upward, this information is insufficient to indicate that the City of Portsmouth's current or future discharge will cause, has the reasonable potential to cause, or contributes to an excursion of water quality standards. Therefore, at the current time, EPA does not have sufficient justification to impose a nitrogen limit for this discharge.

The commenter states that the "NHDES recommended 8 mg/l" for a Peirce Island nitrogen limit, in the context of the Seacoast Region Wastewater Management Study. EPA does not believe that this information is relevant to the permitting action. The NHDES comments were made on a draft "methodology" for development of future WWTF discharge limits. The "recommended" nitrogen levels were not based on information relevant to the Great Bay estuary, rather they were taken from the State of Connecticut's Long Island Sound Nitrogen Total Maximum Daily Load (TMDL). The purpose of this methodology was to allow planners to evaluate various wastewater management alternatives in New Hampshire's seacoast region. These 'hypothetical' permit limits were proposed for the year 2025. The "proposed" permit limits could be used to determine the need for future WWTF upgrades in the seacoast area. The draft methodology clearly states that these "proposed future limits are intended to be *only* (emphasis added) used in this study as a means of comparison for the various wastewater management alternatives and should not be taken to have any legal implication or indicate suggested future permit limits." In other word, these hypothetical permit limits were to be used only as a planning tool.

⁶ See State of the Estuaries, 2006, New Hampshire Department of Environmental Services, pg. 13.

Finally, the City has stated that it is committed to upgrading wastewater treatment to meet the permit requirements. The City has further stated that it supports the idea that the best practical treatment technology should be used in the upgrade to the Peirce Island Primary Treatment plant and that this may include technology to remove nitrogen (see comment II.K above). EPA believes that it would be prudent to include denitrification as part of any upgrade, since installing the technology now presumably would be the most cost effective way to address nitrogen removal, rather than retrofitting the treatment plant later in the event nitrogen limits are required based on the adoption of a numeric criterion and/or on new data that indicate the potential to cause or contribute to a violation of the narrative criterion.

C. The draft permit addresses enterococci bacteria with a “report only” requirement, rather than imposing a numerical effluent limitation. It does so based on the nature of the outfall location and the assumption that the location “is not ordinarily used for recreational swimming,” as well as “the lack of site specific data needed in order to access (*sic.*) the reasonable potential from the plant to contribute to a bacteria violation of the receiving water, which is on the State’s list of impaired waters for enterococci bacteria.” See Fact Sheet at p. 12. As stated in CLF’s prior comments, it is important to note that primary contact recreation does in fact occur (a) in Little Harbor, where children engage in a sailing school and sometimes enter the water, and (b) on New Castle Island and in Kittery, in the vicinity of Portsmouth Harbor. Moreover, the Piscataqua River is classified as a Class B waterbody, and “swimming and other recreational purposes” are among its designated uses. See Fact Sheet at p. 7. These facts require the inclusion of specific effluent limitations for enterococci bacteria, as does the receiving water’s status as being impaired for such bacteria. The above-mentioned “lack of [existing] site specific data” is hardly a basis for *not* imposing such limitations. Rather, such data should be collected and should be a substantive basis for amending the draft permit to include specific limitations.

RESPONSE IV.C.:

In response to CLF’s concern, EPA looked further into the reason for the 303(d) listing. According to DES, the Lower Piscataqua River is identified on the 303(d) list as not supporting primary contact recreation due only to the presence of Portsmouth’s CSOs within that assessment unit and not because of enterococci violations found during ambient sampling. As a matter of fact, the enterococci water quality data collected in the Lower Piscataqua River assessment unit indicate that the river fully supports primary contact recreation. There are no data to indicate that Portsmouth’s treatment plant contributes to enterococci violations in the receiving water.

However, EPA does agree that enterococci data should be collected and has included such a requirement in the permit. This information will be used to ensure that the receiving water is protected for its designated use. Also, the permit contains a monthly average fecal coliform bacteria limit of 14 colonies/100 ml. While this limit is established to protect downstream shellfish beds, it should also ensure that the discharge is sufficiently disinfected to protect the waters for primary contact recreation (i.e., control

or otherwise reduce enterococci bacteria levels). This will be fully evaluated over the term of the permit (see response II.C.2 above).

Therefore, the permit contains a report-only requirement for enterococci.

D. The draft permit fails to include a time line for eliminating combined sewer overflows (CSOs). It is essential that these CSOs be addressed in the near term, and we urge an aggressive timeframe for their elimination as a term of the final permit.

RESPONSE IV.D.:

The existing consent decree between EPA and the City of Portsmouth required the City to propose a CSO Plan to address control of combined sewer overflows. The City did develop a CSO control program and has subsequently completed several separation projects. EPA expects to include a compliance schedule for completing CSO work in the administrative order and consent decree mentioned in Response I.A.1 and 2. above. The Region expects that the City will agree to a CSO construction schedule that results in the greatest reduction in CSOs obtainable in as short a time frame as is feasible. CSO construction schedules necessarily reflect significant financial and construction restraints facing communities with overflows.

E. The draft permit provides that the frequency of toxicity testing can be reduced to not less than once per year, under certain circumstances, and by written request of the City. CLF urges the EPA to amend this language to require a minimum toxicity testing frequency of at least twice per year. We also urge the inclusion of language stating that if the frequency of testing is reduced, it can later be increased if warranted by testing results. Finally, CLF specifically requests that EPA provide CLF specific notice of any written request to reduce testing frequency.

RESPONSE IV.E.:

EPA agrees that toxicity testing should not be reduced to a frequency of less than twice per year for this permit issuance, since data collected will be from the first years of operation of Portsmouth's new and/or upgraded treatment facility(s). EPA may provide for lowering the toxicity testing frequency to not less than once per year in subsequent permit issuance, if warranted.

A provision to notify CLF of any request to reduce to toxicity testing has been included in the permit (see Part I.D.1 of the final permit). EPA has also added language to the permit that specifies that toxicity testing may also be increased after any reduction, if granted, if testing results warrant an increase (see Part I.D.1 of the final permit).

F. The draft permit should include a general re-opener clause to preserve all rights of re-opener pursuant to 40 C.F.R. § 122.62.

RESPONSE IV.F.:

Part II of the permit, which contains the general conditions applicable to all permits, contains a reopener clause consistent with § 122.62

G. Though CLF commends EPA for reversing its initial, tentative decision to *grant* a Section 301(h) waiver for the Peirce Island plant, we are gravely concerned with the substantial time period (15+ years) that has elapsed during the administrative extension of the City's 1985 NPDES permit and 301(h) waiver. We are equally concerned with the prospect of future delay – which the EPA should in no way tolerate – as the City now grapples with potential alternatives to the Peirce Island plant and/or upgrades of the existing facility.

The Clean Water Act established critically important goals, and aggressive timetables for achieving those goals, that have been greatly undermined by the 15+ year administrative extension of the City's 1985 waiver and NPDES permit. As set forth in Section 301(b) of the Clean Water Act, Congress established a rigorous timetable to achieve the Act's objective "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. §§ 1311(b), 1251. Pursuant to that timetable, Congress specifically provided in Section 301(b)(1)(B) that publicly owned treatment works in existence on July 1, 1977 shall, at that time, operate with effluent limitations premised on secondary treatment technologies. 33 U.S.C. § 1311(b)(1)(B). It further provided that "there shall be achieved . . . not later than July 1, 1977, any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations . . . or any other Federal law or regulation, or required to implement any applicable water quality standard established pursuant to this chapter." 33 U.S.C. § 1311(b)(1)(C). This regulatory scheme has been described as follows:

The statute calls for a two phase program for application of effluent limitations. In Phase I, publicly-owned treatment works must provide, by July 1, 1977, secondary treatment (33 U.S.C.A. § 1311(b)(1)(B)) or higher levels of treatment required to implement water quality standards (33 U.S.C.A. § 1311(b)(1)(C)), whichever is more stringent. The failure to provide secondary treatment to effluent discharge within the statutorily imposed period renders that publicly-owned treatment plant ineligible for a discharge permit, and hence in violation of the law. Phase II increases the standard of regulation by requiring public plants to utilize the best practicable waste treatment technology in order to qualify for a discharge permit. 33 U.S.C.A. § 1311(b)(2)(B). The duty of enforcement of these limitations and deadlines is imposed upon the EPA and the right to require such enforcement is granted to private citizens. 33 U.S.C.A. §§ 1319, 1365. *State Water Control Bd. v. Train*, 424 F.Supp. 146, 147-48 (E.D. Va. 1976).

Under Section 301(i) of the Act, Congress specifically provided the opportunity for "municipal time extensions." 33 U.S.C.A. § 1311(i). Specifically, Congress provided that where construction is required to comply with the above requirements of subsection

(b)(1)(B) or (b)(1)(C) of Section 301, “but (A) construction cannot be completed within the time required in such subsection, or (B) the United States has failed to make financial assistance under this chapter available in time to achieve such limitations by the time specified in such subsection,” the plant owner may request a time extension to come into compliance. *Id.* The Act requires that such a request be filed with the EPA “within 180 days after February 4, 1987.” *Id.* Of particular significance, Section 301(i) goes on to state in pertinent part:

The [EPA Regional] Administrator . . . may grant such request and issue or modify such a permit, which shall contain a schedule of compliance for the publicly owned treatment works based on the earliest date by which . . . financial assistance will be available from the United States and construction can be completed, *but in no event later than July 1, 1988.* . . .

33 U.S.C. § 1311(i) (emphasis added).⁷

As the above statutory provisions demonstrate, the Clean Water Act created an aggressive schedule by which municipalities were required to implement secondary treatment and satisfy water quality standards. Together, these provisions establish that EPA has no authority to extend the Act’s secondary-treatment standard deadlines beyond July 1, 1988. *See United States v. City of Hoboken*, 675 F.Supp. 189, 194 (D.N.J. 1987).⁸ In *Hawaii’s Thousand Friends v. City and County of Honolulu*, 821 F.Supp. 1368 (D. Has. 1993), for example, it was held that EPA lacked authority to allow, through an administrative consent order, the discharge of primary-treated effluent after July 1, 1988. There, Hawaii’s Department of Health (DOH) had entered a 1985 consent order which contained interim effluent limitations and a construction schedule developed with approval and direction from the EPA. Thereafter, on July 1, 1985, DOH granted the subject plant an NPDES permit prohibiting the discharge of primary or advanced primary sewage effluent, and establishing effluent limitations “pegged to the *secondary treatment* requirements of the Clean Water Act.” *Id.* at 1377 (emphasis in original). Despite this permit, the EPA apparently intended and believed (as did DOH and the discharger) that the interim effluent limits set forth in the consent order would remain effective after July 1, 1988. *Id.* In a decision invalidating this approach, the *Hawaii’s Thousand Friends* court ruled:

Neither EPA nor its state agent, DOH, has authority to extend secondary treatment deadlines or grant permits to discharge at less than secondary levels beyond July 1, 1988. Accordingly, the provisions in the 1985 consent order between the city and DOH purportedly lowering the effluent limitations for the plant are of no effect after the statutory municipal compliance deadline of July 1, 1988.

⁷ A prior version of Section 301(i) contained a deadline of July 1, 1983. The section was subsequently amended to provide the current deadline of July 1, 1988.

⁸ The *City of Hoboken* case was decided under previous language of Section 301(i) and, therefore, states that it is “clear that EPA had no authority to extend secondary-treatment standard deadlines beyond July 1, 1983,” as opposed to July 1, 1988.

Id. at 1393.

Here, the Peirce Island facility will be in violation of its NPDES permit immediately upon such permit becoming effective. According to the EPA's Fact Sheet:

EPA intends to develop a schedule for the construction of secondary treatment facility(s). EPA plans to work with the City and the United States Department of Justice to modify the existing judicial Consent Decree that the City of Portsmouth entered into with the United States to include an implementation schedule. The modified Consent Decree will contain the key milestones and implementation dates. EPA also expects to set interim limits and conditions that the City will need to meet until the secondary treatment facility is operational.

Fact Sheet at p. 16. As in the *Hawaii's Thousand Friends* case, EPA intends to allow a period of time during which the Peirce Island plant's wastewater discharges will not satisfy the secondary-treatment requirements of the Clean Water Act and the yet-to-be-issued NPDES permit. The Act makes clear, however, that ever since July 1, 1988, the EPA has lacked statutory authority to sanction such discharges. See 33 U.S.C. § 1311(i); *City of Hoboken*, 675 F.Supp. at 194 ; *Hawaii's Thousands Friends*, 821 F.Supp. at 1393.⁹ Thus, the EPA is without statutory authority to pursue its intended course of action.

Without in any way waiving concerns regarding the legality of EPA's intended course of action, CLF comments as follows:

1. Any interim limits and conditions developed by the EPA should be subject to public review and comment.
2. We strongly question whether the re-opening and modification of the existing judicial consent decree – which was executed in 1990, and which in no way addresses the significantly new standards now at issue as a result of the imminent 301(h) waiver denial – is proper. Rather, should the EPA use a judicial consent decree as a vehicle for achieving compliance and establishing an enforceable implementation schedule, we urge it to initiate a new and separate action such that the parties are afforded a meaningful opportunity to address the issues as they currently exist. CLF requests that it be provided specific notice of the public's right, pursuant to 28 C.F.R. § 50.7, to review and comment on any consent decree prior to its approval and entry by the U.S. District Court.

⁹ The *Hawaii's Thousand Friends* court noted that at the time the subject 1985 consent order was drafted, "it was EPA Region IX policy to issue these orders administratively rather than through judicial means." *Hawaii's Thousand Friends*, 821 F.Supp. at 1377. Nothing in the decision indicates that use of a judicial consent decree would have somehow rendered EPA's sanctioning of post-July 1, 1988 primary treatment legal.

3. Although we struggle to understand the legality of any approach that sanctions the Pierce Island facility's discharge with less than secondary treatment, under no circumstances should the EPA allow a period in excess of the NPDES permit term (i.e., 5 years) for the City to implement secondary treatment and meet the effluent limits of the permit. Allowing a period in excess of the permit term would amount to a *de facto* granting of the City's requested 301(h) waiver – a waiver the EPA admits cannot legally be issued. In light of the substantial time that has elapsed since the expiration of the 1985 waiver and NPDES permit – a time period that flies in the face of the clear intent of the Clean Water Act and the rigorous implementation timeframe set forth therein – the EPA must demand and obtain prompt implementation such as to ensure compliance with the yet-to-be issued NPDES permit during its five-year term.

RESPONSE IV.F.:

We agree with CLF that § 301(b)(1)(B) of the Clean Water Act requires POTWs to meet secondary treatment limits by July 1, 1977 (or by certain later dates which have also passed), if certain exceptions are met. We also agree that as a result, the final permit must require immediate compliance with secondary treatment-based limits, notwithstanding the fact that pursuant to its prior permit, the City was legally authorized to discharge its effluent after only applying primary treatment. At the same time, it is clear that the City requires time to plan, design, and construct a secondary treatment plant before it is capable of meeting the final permit limits. In such a case, it is appropriate for EPA to establish an expeditious compliance schedule in an administrative order or judicial consent decree, consistent with §§ 309 (a) and (b) of the CWA.¹⁰ EPA has stated its intent in this case to establish such a schedule first in an administrative order and then in a consent decree. The terms of any new consent decree or modification of the existing consent decree, including interim limits and conditions, would be subject to public notice

¹⁰ CLF asserts that EPA would not have the authority to establish a schedule that goes beyond the statutory deadline in either an administrative order or consent decree, citing to *Hawaii's Thousand Friends v. City and County of Honolulu*, 821 F.Supp. 1368 (D. Haw. 1993) ("*Honolulu*"). Section 309(a) of the CWA clearly provides for the issuance of administrative compliance orders, which must "specify a time for compliance ... not to exceed a time [EPA] determines to be reasonable in the case of a violation of a final deadline, taking into account the seriousness of the violation and any good faith efforts to comply...." See § 309(a)(5)(A). Nowhere does § 309(a) constrain EPA's ability to specify a schedule if the statutory deadline for compliance has passed. The *Honolulu* decision stands for the unremarkable proposition that an administrative compliance order does not legally alter the requirements to which a permittee is subject and therefore does not shield a permittee from citizen suit to enforce the underlying permit conditions. The case does not address judicial consent decrees at all. Like administrative orders, a consent decree does not legally alter the underlying permit requirements. Rather, it is a court approved settlement of an enforcement action brought by the United States representing EPA. The extent to which a federal judicial enforcement action constrains a citizen suit is determined by § 505(b) of the CWA.

and comment pursuant to 28 C.F.R. § 50.7 before the decree is entered by the court. We agree with the many commenters who have urged that there not be undue delay in the City's attainment of the final permit limits. As discussed above, the compliance schedule needs to be expeditious, taking into consideration a variety of factors, including: 1) the time necessary to thoroughly evaluate plant siting and treatment technologies; 2) a reasonable and feasible construction schedule once siting is complete; 3) other work the City is involved in that may produce significant environmental results; and 4) the need for other regulatory approvals.